

A NOTABLE MONSTROSITY OF ARISAEMA TRIPHYLLUM.

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ON June 4th, 1916, Dr. Horace Packard brought to the Gray Herbarium for examination and study a fresh specimen of the upper portion of an extraordinary Jack-in-the-Pulpit. He had discovered it in a low, slightly marshy spot, near a running brook, on the grounds of the Brae Burn Country Club, at West Newton, Massachusetts. The plant was about 3-4 dm. high and nothing unusual was noted regarding its foliage (which was not brought with the flowering stalk and has not been seen by the writer).

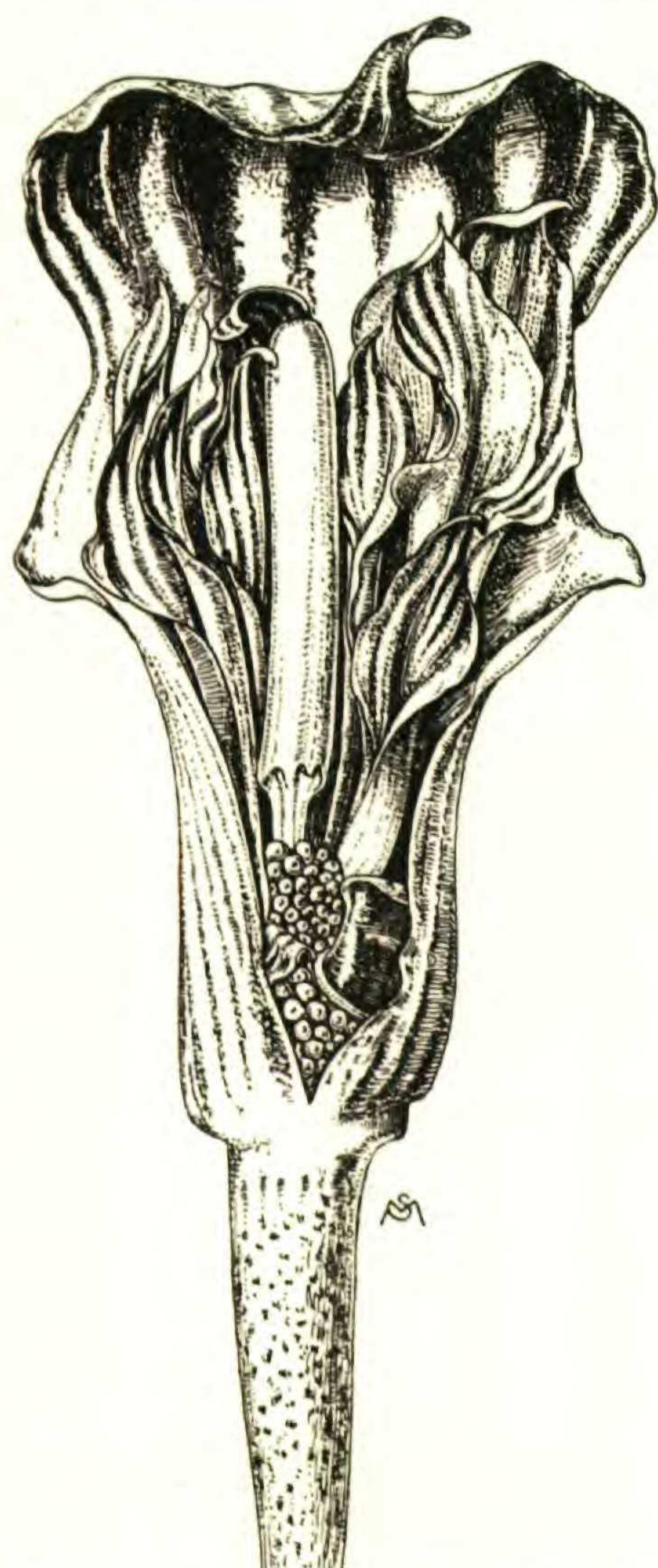


Fig. 1. *Arisaema triphyllum* with supernumerary spathes. $\times 1$.

The conspicuous teratological features of the plant arise from the multiplication of the spathe or canopy-like floral bract. This usually single structure is here represented not merely by one main spathe, which is of unusual size though otherwise nearly normal form and markings, but within this are no less than twelve smaller spathes of varying sizes and proportionately slender development. All of these spathes arise at nearly the same height on the axis, the theoretically intervening internodes not being perceptible. The spadix is solitary and although unusually robust does not seem to show abnormality.

At one point, partially constricting the middle of the fertile portion of the spadix, is a broadish and striped belt-like structure, the nature

of which is not at first sight evident. However, examination shows that it is undoubtedly an imperfectly developed spathe, which appears to have been caught in this position while the inflorescence was in the bud-stage, and in consequence to have been distorted in its subsequent development.

As in the case of most monstrosities, no environmental factor was observed which would in any way account for the deformity. The scape is a little more than ordinarily robust, as is also the spadix, but both are symmetrical and show no flattening, grooving, or other evidence of fasciation.

The secondary spathes are wholly sterile. As will be seen from the admirable sketch drawn by Mr. F. Schuyler Mathews the spathes are of varying breadth and in some cases rather tightly in-rolled. Some are also considerably shorter than the others, and these being at the back in the interior of the main spathe cannot be shown in the drawing.

Exceedingly few teratological developments have been observed, or at least recorded, in *Arisaema triphyllum* and when it is borne in mind that the species is common, widely distributed, conspicuous and generally known, and also that it flowers at a time when collectors are in the first enthusiasm of a new open season, this is rather surprising.

The late Prof. W. W. Bailey¹ described briefly a garden specimen in which two spadices were observed in a single spathe. Later² he mentioned a specimen sent to him by Miss Eloise Butler of Minneapolis, in which a double spathe included a single spadix. Miss Alice G. Clark³ describes and figures a more complicated case (found at East Weymouth, Massachusetts) in which two somewhat unsymmetrically related spathes enclosed three somewhat flattened and grooved spadices.

Prof. Packard has most kindly given to the Gray Herbarium the monstrosity here described and it has been preserved in alcohol.

GRAY HERBARIUM.

¹ Bull. Torr. Bot. Club, ix. 91 (1882).

² Bot. Gaz. ix. 177 (1884).

³ RHODORA, vi. 163 (1904).